element (4), wherein a respective intermediate layer (2) that is defined in respect of its gap width is arranged each time between the scintillator (6) and the CMOS chip (3) and between the CMOS chip (3) and the ceramic basic element (4), and wherein said intermediate layer (2) contains at least two adhesives (A, B) of different consistency and spacers (5), and where first an intermediate layer (2) is formed between a CMOS chip (3) and a ceramic basic element (4), where spacers (5) and quantities of an adhesive (A1) are applied to a surface of the ceramic basic element (4) during the first step, where the applied quantities of an adhesive (A1) project from the spacers (5), where subsequently the CMOS chip (3) is placed on said quantities and is bonded and fixed while resting on the spacers (5) and quantities of the adhesive (A1), and where during a second step the gap remaining between the CMOS chip (3) and the ceramic basic element (4) is completely filled with an adhesive (B) which is applied to a side of the CMOS chip (3) in the horizontal position and enters the gap under the influence of capillary forces and is subsequently allowed to cure and subsequently a second intermediate layer (2) is formed between a scintillator (6) and a CMOS chip (3), where at least quantities of the adhesive (A2) are applied, during the first step, to the bumps that are provided in optically inactive regions of the CMOS chip surface, after which the scintillator (6) is arranged on the

Sub B1 (Cont'd)

bumps and is bonded and fixed while resting on the bumps and on the quantities of an adhesive (A2), and where in a second step the gap remaining between the scintillator (6) and the CMOS chip (3) is completely filled with an adhesive (B) which is applied to one side of the scintillator (6) in the horizontal position and enters the gap under the influence of capillary forces and is subsequently allowed to cure.

12. (amended) An X-ray examination apparatus that includes at least one detector as claimed in claim 1.

REMARKS

The foregoing amendments to the claims were made solely to avoid filing the claims in the multiple dependent form so as to avoid the additional filing fee.

The claims were not amended in order to address issues of patentability and Applicants respectfully reserve all rights they may have under the Doctrine of Equivalents. Applicants furthermore